

REMARKS/ARGUMENTS

In the Office Action, the Examiner allowed claims 24-26 and 47; rejected claims 1, 11, 21, 22, 27, 28, and 46 under 35 U.S.C. 112, first paragraph; rejected claims 1, 2-6, 11-16, and 21 under 35 U.S.C. 103(a) as being unpatentable over Ruszczyk (U.S. Patent No. 6,205,150) in view of Blake et al. (RFC 2475); and rejected claims 7-10, 17-20, 22, 23, 27, and 28 under 35 U.S.C. 103(a) as being unpatentable over Ruszczyk in view of Blake et al, and further in view of Yin (U.S. Patent No. 6,442,138). The rejections are fully traversed below. Reconsideration of the application is respectfully requested based on the following remarks. Claims 1, 11, 21-23, 27, 28, 38, 40, 42, 44, and 46 have been amended. Accordingly, claims 1-47 remain pending in this application.

REJECTION OF CLAIMS 1, 11, 21, 22, 27, 28, AND 46 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

Claims 1, 11, 21, 22, 27, 28, and 46 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner states that the specification on page 10, lines 10-12 does not support, "... the load value corresponding to an actual amount of demand for each service class." Although the Applicant believes that this is supported in the specification on page 10, lines 10-16, the claims in question have been amended without prejudice to recite more clearly the present invention. For example, claim 1 now recites "... the load value corresponding to a number of streams for each service class ...". Support may be found in the specification on page 10, lines 10-16; page 12, lines 19-20; and elsewhere. Therefore, the rejection under 35 U.S.C. 112 is no longer applicable.

PATENTABILITY OF CLAIMS 1-23 and 27-46

Claim 1 is directed to providing load information for one or more data streams within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers. Claim 1 as amended requires, among other things, "metering a load value for each service class of at least one of the packets, the load value corresponding to a number of streams for each service class". That is, in the context of claim 1, at least one of the packets received is metered for the number of streams in each service class. Support for the amendment may be found in the specification on page 10, lines 10-16; page 12, lines 19-20; and elsewhere.

Claim 22 is directed to allocating resource to one or more data streams within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers. Claim 22 as amended requires, among other things, "receiving one or more tickets into a selected core router, the tickets indicating a total load for each one of a plurality of service classes, the total load corresponding to a total number of streams for each one of the plurality of service classes". That is, in the context of claim 22, the tickets indicate the total number of streams in each service class. Support for the amendment may be found in the specification on page 10, lines 10-16; page 11, lines 2-4; page 12, lines 19-20; and elsewhere.

Claims 11, 21, and 46 require a similar limitation as noted for claim 1 whereas claims 27 and 28 require a similar limitation as noted for claim 22.

One of the many advantages provided by the present invention is for determining load information (e.g., the number of streams) for each class that is being received by a particular core router or group of core routers. The core router(s) may utilize this load information to calculate new bandwidth assignments on a per stream basis, for example. That is, the core router may be able to dynamically allocate bandwidth for each stream within each class. The resource allocation can be based on the actual load being utilized by the streams of a given class. (See page 10 lines 10-16)

In contrast, the cited arts lack the advantages of the present invention. This is because the cited art, taken alone or in combination, fail to teach or suggest metering a load value or indicating a total load in the manner claimed. In particular, Blake et al. merely discloses an architecture for implementing scalable service differentiation in the Internet. Packets are classified and marked to receive a particular per-hop forwarding behavior on nodes along their path. (See Abstract) Of importance, Blake et al. discloses a traffic meter that measures the "temporal" properties (e.g., rate) of the stream of packets selected by a classifier against a traffic profile specified in the TCA (traffic conditioning agreement), wherein the traffic profile provides rules for determining whether a particular packet is in-profile or out-of-profile. (See pages 5 and 15) In other words, Blake et al. discloses a traffic meter for only measuring the packet's rate against the traffic profile; however, Blake et al. does not teach or suggest metering/indicating the number of streams (e.g., load) for each service class. Therefore, it is submitted that claims 1, 11, 21, 22, 27, 28, and 46 are patentably distinct from Blake et al. Similarly, it is submitted that claims 1, 11, 21, 22, 27, 28, and 46 are also patentably distinct from Ruszczyk and Yin. As such, the rejection under 35 U.S.C. 103(a) is no longer applicable.

The Examiner's rejections of the dependent claims are respectfully traversed. However, to expedite prosecution, all of these claims will not be argued separately. Claims 2-10, 12-20, 23, and 29-45 each depend either directly or indirectly from independent claims 1, 11, 21, 22, 27, 28, or 46 and, therefore, are respectfully submitted to be patentable over cited arts for at least the reasons set forth above with respect to claims 1, 11, 21, 22, 27, 28, or 46. Further, the dependent claims require additional elements that when considered in context of the claimed inventions further patentably distinguish the invention from the cited arts. For example, claims 3 and 4 respectively require among other things that "the one or more tickets indicate a total number of streams for each class that is being transmitted to the destination" and "each ticket indicates a total number of streams for a particular class that are being transmitted to the destination. As such, metering a load value or indicating a total load includes "non-temporal" properties (e.g., number of streams) of each packet/stream in contrast to Blake et al. Claims 13 and 14 require a similar limitation.

SUMMARY

It is respectfully submitted that all pending claims are allowable and that this case is now in condition for allowance. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

If any fees are due in connection with the filing of this Amendment, the Commissioner is authorized to deduct such fees from the undersigned's Deposit Account No. 50-0388 (Order No. CISCPI27).

Respectfully submitted,
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